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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,606	08/05/2003	Karl-Heinz Forster	163-29 CIP	6609
23869	7590	04/18/2005	EXAMINER	
HOFFMANN & BARON, LLP 6900 JERICO TURNPIKE SYOSSET, NY 11791			MACK, COREY D	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/634,606	Applicant(s) FORSTER ET AL.	
	Examiner Corey D. Mack	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 41-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 41-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/8/04, 11/7/03</u> . | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> . |

Continuation of Attachment(s) 6). Other: IDS filed 10/27/03, 10/06/03, 8/25/03, 8/5/03.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-11, 13, 14 and 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Sparks (US 5,663,508).

A. With respect to Claims 1, 8 and 42, Sparks discloses a flow sensor comprising a paddle 18 being disposed at least partially in an orifice 42, a fluid flow directed through the orifice, the paddle displaced in response to the fluid flow (column 3, lines 36-39); and, a support member 14 positioning the paddle at least partially in the orifice, the support member including a plurality of strain gauges 26, the plurality of strain gauges being disposed on only one side of the support member, at least one of the plurality of strain gauges being mechanically stressed in response to the paddle being displaced by the fluid flow (column 3, line 23 – column 4, line 14).

B. With respect to Claims 2 and 9, Sparks discloses that the paddle 18 includes a first surface area, the surface area of the paddle being adaptable to provide different displacements of the paddle in response to the fluid flow (column 4, lines 29-61).

C. With respect to Claims 3 and 10, Sparks discloses that the paddle includes a first surface area, the support member including a second surface area, the first surface area being unequal to the second surface area (See Fig. 1-2).

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D. With respect to Claims 4 and 11, Sparks discloses that the paddle 18 does not have any electrical components mounted thereon and the plurality of strain gauges 26 are mounted exclusively on the support member 14 (column 3, lines 64-66; See Fig. 2).

E. With respect to Claims 6 and 13, Sparks discloses that at least one of the plurality of strain gauges is responsive to at least one of transverse stress and longitudinal stress (inherent).

F. With respect to Claims 7 and 14, Sparks discloses that at least one of the plurality of strain gauges is piezo-resistive (column 3, line 64 – column 4, line 14).

G. With respect to Claims 41, 43 and 44, Sparks discloses a flow device including a first mating portion 38 and second mating portion 40, the first mating portion including a first aperture 38a, the second mating portion including a second aperture 40a, the first aperture and the second aperture being at least partially aligned such that the first aperture and the second aperture define a channel 42 through the first and second mating portions when the first and second mating portions are joined together, the channel being able to communicate the medium therethrough; and, a circuit board 44 sandwiched between the first mating portion and the second mating portion, the circuit board including at least one sensor, the at least one sensor being at least partially aligned with the channel, the at least one sensor being able to detect a physical characteristic of the medium flowing through the channel (column 5, lines 40-67; See Fig. 5-6).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sparks (US 5,663,508) in view of Lasher (US 3,340,733).

A. With respect to Claims 5 and 12, Sparks discloses the claimed invention, except he does not disclose that the gauges are operatively configured in a Wheatstone bridge. Lasher discloses a flow sensor comprising strain gauges 22, 23 that are operatively configured in a Wheatstone bridge in order to measure the flow of gas through conduit 10 (column 3, line 75 – column 4, line 41). Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to include in Sparks strain gauges configured in a Wheatstone bridge as Wheatstone bridges are readily available, easy to manufacture and easy to replace methods of measuring gas flow.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey D. Mack whose telephone number is (571) 272-2181. The examiner can normally be reached on M-F, 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Corey D. Mack, Esq.
Patent Examiner
Art Unit 2855

April 7, 2005



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